UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rev. 1450

P O Box 1450 Alexandria, Virgima 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

26021 7590 09/30/2010 Hogan Lovells US LLP 1999 AVENUE OF THE STARS SUITE 1400 LOS ANGELES, CA 90067 EXAMINER
HEITBRINK, TIMOTHY W
ART UNIT PAPER NUMBER
1791

DATE MAILED: 09/30/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/599,544	05/23/2007	Youhei Sakai	81872.0129	1542	

TITLE OF INVENTION: SILICON CASTING APPARATUS AND METHOD OF PRODUCING SILICON INGOT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/30/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica	ed below or directed otl	ng the Patent, advance o herwise in Block 1, by (a) specifying a new o	orresp	ondence address;	and/o	(b) indicating a sepa	arate "F	EE ADDRESS" for
CURRINT CORRESPONDENCE ADDRESS (None the Block I for any change of address) 26021 7590 99/90/2010 Hogan Lovells US LLP 1999 AVENUE OF THE STARS SUITE 1400				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
				I here States addre transi	Certificate of Mailing or Transmission hereby certify that this Fec(s) Transmittal is being deposited with the United tates Postal Service with sufficient postage for first class mail in an envelope didressed to the Mail Stop ISSUE FEE address above, or being facsimile ammitted to the USPTO (571) 273-2885, on the date indicated belaw				
LOS ANGELES	s, CA 90067								(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CON	FIRMATION NO.
10/599,544 TITLE OF INVENTION	05/23/2007 SILICON CASTING A	APPARATUS AND MET	Youhei Sakai THOD OF PRODUCIN	G SII	LICON INGOT		81872.0129		1542
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	$\neg \neg$	DATE DUE
nonprovisional	NO	\$1510	\$300		\$0		\$1810		12/30/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS						
HEITBRINK,	TIMOTHY W	1791	117-018000	_					
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un recordation as set fort	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach IND RESIDENCE DAT. less an assignee is ident h in 37 CFR 3.11. Comp	ange of Correspondence	data will appear on t T a substitute for filing	in to a mative or ag attorn If be p or type the pat g an as	3 registered pater ely, firm (having as a gent) and the name eys or agents. If rinted.	memb es of u no nan	er a 2p to p to se is 3	locumer	nt has been filed for
4a. The following fee(s) Issue Fee	iate assignee category or are submitted:		b. Payment of Fee(s): (Pleas ed.	Individual Co	orporati ny prev	on or other private gr		
Advance Order -	☐ Publication Fee (No small entity discount permitted) ☐ Payment by credit card. From PTO-2038 is attached. ☐ Advance Order - # of Copies ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoit Account Number (enclose an extra copy of this for					y, or credit any copy of this form).			
	s SMALL ENTITY state	us. See 37 CFR 1.27.					FITY status. Sec 37 C		
interest as shown by the	records of the United Sta	uired) will not be accepte ites Patent and Trademark	Office.	ian ur	c applicant, a regi	stcreu.	attorney or agent, or to	ic assig	nee or onter party in
Authorized Signature					Date				
Typed or printed name				Registration No.					
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu (irginia 22313-1450. DO k13-1450.	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the e Chief Information O COMPLETED FORM	or re s estin individ fficer S TO	tain a benefit by t mated to take 12 a dual case. Any co , U.S. Patent and THIS ADDRESS	he pub minuter omment Trader S. SEN	lic which is to file (and to complete, including son the amount of tile ark Office, U.S. Dep D TO: Commissioner	I by the ng gathe me you artment for Pate	e USPTO to process) ering, preparing, and require to complete to f Commerce, P.O. ents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 09/30/2010

APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
	10/599,544 05/23/2007		Youhei Sakai	81872.0129	1542		
	26021 75	90 09/30/2010		EXAMINER			
	Hogan Lovells U	S LLP	HEITBRINK, TIMOTHY W				
	1999 AVENUE O	F THE STARS	ART UNIT	PAPER NUMBER			
	SUITE 1400	7A 00067	1791				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 747 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 747 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/599 544 SAKAI, YOUHEI Notice of Allowability Examiner Art Unit Tim Heithrink 1791 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to interview of 9-24-2010. The allowed claim(s) is/are 1-17. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) X including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 9-24-2010. Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application Interview Summary (PTO-413), 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Paper No./Mail Date 9-24-2010. Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 9-29-2006 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material

/Tim Heitbrink/ Primary Examiner, Art Unit 1791 Other .